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Building a Community of Learners: Rethinking Teaching & Learning



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Change & Competence: What are the key issues?

“Education is now recognized as one of the critical drivers for social and economic change” (Grose & Freedman, 2014: 34). Education experts caution, “If we want learners who can thrive in turbulent, complex times, apply thinking to new situations, and change the world, we must reimagine learning”, (Fullan, Quinn & McEachen, 2018:13). To ensure that education meets the needs of today’s pupils and informs their aspirations for the future, both personal and professional, then we need to re-think learning. We are preparing students to be leaders in tomorrow’s world.

What should be the key pedagogies and strategies required by teachers, enabling pupils to develop global competencies? How do school leaders and municipal/system leaders need to engage teachers to support a connected, digital and knowledge economy, and a sustainable, productive healthy society?

McKinsey and Company (2017) cautions that 60% of all occupations have at least 30% of activities that technically can be automated, potentially affecting 50% of the world’s economy. Technology and digital demands are part of this changing workforce and highly skilled employees will benefit. This will be a ‘disruptive innovation’; changing the way we work, and interact (Christensen, Raynor & McDonald, 2015). OECD (2016) encourages educators to look beyond digital skills, (referring to performing the task or concept in a defined setting), towards embedding digital competencies (dealing with application in a broader frame and new unfamiliar situations involving judgement and attitudes).

Globally, education systems face the challenge of responding to rapidly changing societies, made even more difficult because the task of education is in part to prepare young people for a future, which is unknown and often unpredictable. Educators, futurists, and policy planners are already defining what global competencies assist pupils to succeed in the 21st century. A number of jurisdictions, including Ontario and Norway are embedding these global competencies into their curriculum.

The Quality Framework for Norway notes, “Education shall promote the versatile development of pupils and their knowledge and skills” and address the diversity of their backgrounds and frameworks. The Quality Framework for Norway recognizes the need, “to develop pupils’ cultural competence for participation in a multicultural society” and “promote cultural understanding and develop self-insight, identity, respect and tolerance”. Motivated pupils need to be provided choice of tasks that will challenge them, and “opportunities to explore, both alone and with others”. Pupils need activities and approaches “which stimulate their creativity and innovative abilities”. These all form part of global competencies, which we will explore with a focus on an Inquiry approach.

More than an end in itself, education is a means to deliver our vision of tomorrow. It is the foundation for promoting development, reducing economic disparities and creating a society of inclusiveness. It forms the fourth United Nations Goal of Sustainable Development to, “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all” (UNESCO, SDG4, 2015). The OECD (2017) suggests rethinking and re-envisioning the skills, attitudes, attributes, and knowledge that will enable today’s pupils to be engaged, productive citizens in a global economy.

What are the skills and knowledge required by today’s learners for tomorrow’s rapidly changing, diverse, interconnected, and digital world? What are the century global competencies to educate today’s learners to be effective global citizens? “How can education systems best support the kind of teaching that develops those skills?”¹ What is the role of teachers in leading innovation?” (OECD, 2016:3). What are the attitudes, skills, knowledge and understanding required for tomorrow’s teachers? How do schools develop creativity, critical thinking and collaboration? What are the new considerations for policy and practice?

Andreas Schleicher, Director for Education and Skills at OECD, mused about reimagining the teacher profession by building and incorporating innovative practices². Di Cecco and Freedman (2013), in Collaborative School Reviews, confirmed the impact of building collective efficacy. **Teachers have to be involved in discussions around the purposes and practices of TLW. This strategy involves collegial monitoring and coaching. Data should drive action. Teaching Learning Walks (TLW) are evidence-based ways to gather information about pupil learning, school development and the implementation of Collaborative Professional Inquiry. Information gathered from being intentionally visible in classrooms provide the basis for collaborative conversations.**

Education is shifting from institutions emphasizing teaching to ones focused on learning. The next transformation will be to institutions of thinking and 21st century global skills/competencies. This will require a balance of effective evidence-based practices, reliance on student data, and emerging learner-centric pedagogies, structures and practices (Grose, 2016). Digital literacy and networked digital technologies build on traditional literacy and mathematical skills. An increasingly diverse population and workplace requires renewed emphasis on social emotional skills, teambuilding, conflict resolution, and shared leadership. **All of these are described as important for Norwegian pupils.** Expected and unexpected labour market changes will add to the pressure for transformative change in developing a skilled and educated workforce.

¹ <https://www.mckinsey.com/industries/social-sector/our-insights/how-to-improve-student-educational-outcomes-new-insights-from-data-analytics>

² <https://www.teachermagazine.com.au/columnists/andreas-schleicher/reimagining-the-teaching-profession>

Intentionally closing achievement and academic gaps for underserved and underachieving cohorts are critical for equity and excellence to become transformative. “Teachers will spend less time as information providers” and more as “learning coaches” in assisting pupils through mentoring, encouraging, and supporting pupils (Brooks & Holmes, 2014: 29). **The Norwegian Quality Framework describes teachers as, “skilled and enthusiastic guides and teachers of knowledge”.**

OECD’s 2018 analysis of the *Teaching and Learning International Survey (TALIS)* describes the trends shaping education. Recognizing that the world is more connected, diverse, urbanized, and technologically integrated and advanced, teachers report lacking the skills and knowledge to move the 21st Century agenda forward. The TALIS survey responses indicate teachers feel unprepared, in specific areas including:

- Dealing with ethnically, linguistically, and culturally diverse classrooms,
- Providing an inclusionary classroom, teaching and supporting pupils with special needs,
- Focusing on supporting the incorporation of the effective use of information and communication technologies (ICT) into schools and classrooms,
- Enabling pupils to access and apply these new technologies in the workplace using experiential learning³, and
- Incorporating collaborative problem solving and critical thinking into pedagogical practices.

The World Bank’s 2018, *Learning to Realize Education’s Promise* identifies these areas for teacher capacity building to support developing Global Competencies:

- Improving teacher-learner interactions and increasing learner voice,
- Using achievement data to measure learning along with the metrics of delivery as a gauge to know whether the approaches are working,
- Working collaboratively using metrics of learning for improvement,
- Analysing the evidence to go deeper into the learning, and
- Engaging communities respectfully.

The research literature scan supported the following competencies that teachers will require to ensure pupils receive global competencies to prepare them for 21st century living and learning:

- Collaborative professionalism involving shared problem-solving and decision making,
- Refining pedagogical skills to engage and challenge students’ critical thinking,
- Designing rich, authentic experiential learning opportunities,
- Enabling digitally connected and integrated learning environments,
- Creating inclusive, respectful learning environments to foster and support culturally, ethnically, linguistically diverse classrooms and strengthen learner voice and respond to learners’ needs and abilities, and

³ What works: Research into Practice, #17 (2009). Local interactions with small groups of students create greater shared understanding and classroom coherence

- Connecting with and engaging communities respectfully.

It is important to remember that collaborative inquiry takes time and trusting relationships. Where there was capacity building, ongoing support and time for reflection, collaborative inquiry was more relevant and impactful on student outcomes⁴. There will be issues and the additional support assists teachers and school leaders in overcoming inhibiting barriers.⁵

Implications for 21st Century Practice

Schools are not isolated organizational structures but rather complicated, inter-connected webs of processes and relationships (Di Cecco & Freedman, 2013; Hargreaves & O'Connor, 2018). In a learning organization, educators work to refine their professional capacity to increase pupil outcomes. Pupil learning is affected positively by staff learning, “so that the learning of teachers becomes as important as the learning of students” (Freedman, 2007: 53). **This is supported in the Norwegian Directorate for Education and Training’s Framework for Basic Skills and the Professional Digital Competence Framework for Teachers.**

Collaborative Professionalism, Shared Problem Solving and Decision-Making

OECD describes collaborative problem solving as, “an awareness of group dynamics, to ensure team members act in accordance with the agreed-upon roles, resolve disagreements and conflicts while identifying effective pathways and monitoring progress towards a solution” (OECD, 2017). Collaborative problem solving involves both teamwork and taskwork, and individual and collective cognition and communication (OECD, 2017). To realize collaborative professionalism means re-thinking teacher training and development, so that teachers become collaborative problem-solvers and shared decision-makers. Professional Inquiry builds Collaborative Professionalism.

Hargreaves and O'Connor (2018), in their monograph *Collaborative Professionalism* discuss the importance of shared teachers’ work and collective dialogue to improve learning for students. Schools should move from a congenial towards a collegial environment. The authors define collaborative professionalism as, “How teachers and other educators transform teaching and learning together to work with all pupils to develop fulfilling lives of meaning, purpose and success” (2018: VI). Hargreaves and O'Connor remind educators, *Collaborative Professionalism* is intentional, involving evidence-based practices, rigorous planning, and frank discourse with collegial feedback. They identified ten components necessary for Collaborative Professionalism:

- Collective autonomy,
- Collective efficacy,

⁴ DeLuca, Bolden & Chan (2017)

⁵ Barriers- it is time, inefficient, an add-on, lack of confidence in one’s skills and the skills of peers, relevance

- Collaborative inquiry,
- Collective responsibility,
- Collective initiative,
- Mutual dialogue,
- Joint work,
- Common meaning and purpose,
- Collaborating with students, and
- Big Picture Thinking for All.

As learning increases in complexity, schools and school systems must transition to more agile, adaptive and dynamic learning environments. Municipal and school leaders need to involve teachers as shared players in improvement and change. Opportunities need to be created to allow teachers' exploration, growth and risk-taking in the learning process. School and system leaders need to provide opportunities for teachers to work together on improving outcomes, personalize their own professional learning designs, and encourage creative thinking by providing time for ideas to evolve (Grose & Freedman, 2014). **Inquiry based learning and Collaborative Professionalism are one approach to reimagining schools.**

Professional collaboration can enhance student outcomes. The analysis from TALIS indicates the importance of teachers' self-efficacy. PISA data show "that teachers' sense of self-efficacy – their belief in the ability to teach, engage students, and manage a classroom – has an impact on student achievement and motivation" (OECD, 2015: 41). It influences teachers' own practices, enthusiasm for teaching and commitment. The PISA/TALIS analysis found that teachers' positive relationships with other teachers in school increase their sense of self-efficacy (OECD, 2015). Additionally, teachers' "ability to participate in decision-making at school is significantly related to a strong increase in teachers' job-satisfaction" (OECD, 2015: 47). This needs to be intentional. Teachers require interactive opportunities to collaborate on classroom materials that influence classroom learning. **Collaborative Professional Inquiry allow these interactions to happen.** These opportunities can mitigate the negative effects of challenging classrooms (OECD, 2015). Enabling positive collaboration supports teachers' ability to persevere and overcome workload stressors. "Much of this literature on teachers' resilience defines it as an adaptive response to stress and adversity; the ability to 'bounce back'" (Faukner & Latham, 2016: 144). This is what we do in Inquiry-based learning.

Ingersoll, Dougherty and Sirinides (2017) in their analysis of nearly one million teachers' responses found that when teachers' roles in decision-making, professional learning and leadership are shared, student achievement and engagement increases. Teachers and administrators need preparation and guidance to initiate and sustain change dynamics. They

need to be engaged as collaborative partners in the school improvement process (Di Cecco & Freedman, 2013). This requires moving from congenial to authentic, collaborative, reciprocal relationships. For school development, it means trusting relationships, joint input, and shared decision-making so concerns can be raised without reprisals. In this way, teachers are engaged and share in accountability for school improvement/development. Inquiry can be one way to begin meaningful professional collaboration.

Refining Pedagogical Skills to Engage and Challenge Pupils' Critical Thinking and Creativity

If teachers are to become collaborative professionals engaged in critical thinking and problem solving, they need to gain skills and knowledge themselves to be able to develop these competencies in learners. There is consensus that education systems should change to nurture 21st century skills/competencies including curiosity, innovation, and critical thinking. How does one revise/construct a new type of balance between teaching existing knowledge, while facilitating learners to be adaptively creative; able to creatively collaborate on possible, probable and preferable solutions for known and unknown complex problems? Fullan, Quinn and McEachen define capacity building as, "the process of developing the knowledge, skills, and commitment of individuals and organizations to achieve desired results" (2018: 98). Increasingly the focus is on collective capacity building, as opposed to individual, one-off learning.

As education shifts, the next transformation moves to institutions of thinking and 21st century global skills/competencies. This will require a balance of effective evidence-based practices, reliant on student data, and emerging learner-centric pedagogies, structures and practices (Grose, 2016). **When using TIDE in walking, talking and learning from classroom visits, the leadership team is gathering evidence of learning to collaboratively share with teachers.**

To prepare for 21st century learning, teachers must expand from purveyors of knowledge and skills. In their reimagined capacity of collaborating and inquiring about improving learner outcomes, teachers can act as researchers and discoverers of knowledge. Brooks & Holmes suggest pupils need to see and be participants with teachers in the **inquiry learning process** to see how teachers make decisions, and select/reject materials and approaches, using inquiry and problem/project-based learning. They advocate that 21st Century Competencies promote, "a broad repertoire of pedagogical strategies to support the emphasis on deep learning and new learning partnerships" (2016: 33).

The literature is linking creativity to critical thinking, "in order to teach to the future ... children must be prepared, empowered and skilled to find creative solutions to unexpected problems" (Faulkner & Latham, 2016: 145). They argue, supported by OECD (2019), that creativity is fundamental to learning. This can involve pupils interacting with authentic, open-ended problems requiring critical thinking. "Pupils are attracted to today's issues, making something meaningful happen" (Fullan, 2016: 12). To make this happen, coherently across classrooms and schools requires intentional capacity building.

Kereluik, Mishra, Fahnoe and Terry, in Table 7 of their paper, advocate for what they refer to as Meta Knowledge (2013: 139):

- Inventive thinking⁶,
- Creativity,
- Creativity and imagination,
- Creativity and critical thinking,
- Creating mind, and
- Play and design.

Hattie's comprehensive meta-analysis of the research outlines teaching approaches shown to have positive impact in schools (Hattie, 2009). Fullan and Langworthy support approaches ranging from "project-based learning through direct instruction to an inquiry-based model" where the teacher uses strategies based on student needs (2014: 20). Arising from these deepening approaches to teaching and learning has been a renewed consideration of how and what to assess. 'If there is value in promoting new pedagogical models that make it possible for pupils to apply their learning to real-world problems with authentic audiences, then assessments need to be adapted to widen the range of skills and knowledge being observed'. Binkley et al. (2012: 20). This requires ongoing educator professional development to ensure that assessment skills align with the broader goals for student learning. Brooks and Holmes' (2014) review of the literature led them to comment that, "problem-based learning led to better skill development and long-term retention of pupils than conventional approaches". It also produced greater satisfaction in both teachers and students" (2014: 23). Professional Inquiry supports the development of those skills.

Summary

These trends for new skills and competencies emerging in a digitized, automated, linked and diverse workplace continue to influence education and learning. Tomorrow's workers will likely face temporary, project-based activities with less security and more collaboration and interaction albeit remotely via the cloud (Economist Intelligence Unit, 2015)⁷. Educators can be agents of change. This requires commitment and involvement from all stakeholders (Fullan & Gallagher, 2020). Collaborative Inquiry is important for teachers and pupils as outlined in *Leading Learning for Today and the Future* (Riehl, 2020).

To sustain improvement, the evidence of impact on learning requires ongoing monitoring. Together teachers and school/system leaders intentionally must gather evidence of impact through pedagogical documentation of *observation, conversation and pupil products*. **Teaching,**

⁶ Also sometimes referred to as divergent thinking - de Bono

⁷ More given the realities of COVID-19

Learning Walks⁸ form a component of this type of pedagogical documentation. In this way, the strategies are linked and inter-connected and global competencies are embedded in the teaching-learning process. The evidence gathered can be used in sharing of the implementation and impact of the PCI.

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⁸ TIDE frame

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